

**REMARKS**

By this Amendment claim 1 has been amended to include the features of claim 5, claims 4 and 5 have been canceled, claims 6 and 14 have been amended, and new claims 15-39 have been added, new claim 15 being based on original claims 1, 7 and 9, and new claim 27 being based on original claim 13. Entry is requested.

In the outstanding Office Action the examiner has rejected claims 1-4, 6 and 14 under 35 U.S.C. 103(a) as being unpatentable over Huang et al., in view of Joenathan, he has rejected claim 5 under 35 U.S.C. 103(a) as being unpatentable over Huang et al. in view of Joenathan and Wilcock et al., he has rejected claims 7-9 under 35 U.S.C. 103(a) as being unpatentable over Huang et al. in view of Joenathan and Windecker et al., he has rejected claim 10 under 35 U.S.C. 103(a) as being unpatentable over Huang et al. in view of Joenathan and Rubbert et al., and he has rejected claims 11-13 under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Joenathan and Brandestini et al.

The inventor asserts that these rejections must be withdrawn.

Huang et al. disclose a color-encoded fringe projection and phase shifting technique for rapid 3-D surface contouring applications.

Joenathan disclose various phase measuring algorithms used in phase-measuring interferometry.

Wilcock et al. disclose an averaging process for filtering data.

However, no combination of these references would result in averaging two groups of basic images and then forming an average of this first average with a third group, which results in a weight of 0.25 for each of the first two groups and 0.5 for the third group. Thus, amended claim 1 is believed to be unobvious over these references.

With respect to new claim 15, even when considering Windecker it would not be suggested to act on each field of a basic image before sampling the basic image.

With respect to new claim 27, although Brandestini teaches the use of a contrast image, it is not known to use the method of claim 1 to create a contrast image with a reduced amount of noise.

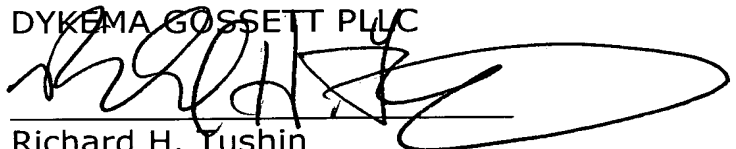
Favorable reevaluation of this application is requested.

Additional claim fees can be charged to Deposit Account No. 04-02223.

Respectfully submitted,

DYKEMA GOSSETT PLLC

By:



Richard H. Tushin  
Registration No. 27,297  
Franklin Square, Third Floor West  
1300 I Street, N.W.  
Washington, DC 20005-3353  
(202) 906-8680